



LTS Research Laboratories, Inc.
Safety Data Sheet
Aluminum Nickel Boron

1. Product and Company Identification

Trade Name: Aluminum nickel boron
Chemical Formula: AlNiB
Recommended Use: Scientific research and development

Manufacturer/Supplier: LTS Research Laboratories, Inc.
Street: 37 Ramland Road
City: Orangeburg
State: New York
Zip Code: 10962
Country: USA
Tel #: 855-587-2436 / 855-lts-chem

24-Hour Emergency Contact: 800-424-9300 (US & Canada)
+1-703-527-3887 (International)

2. Hazards Identification

Signal Word: Danger



Hazard Statements: H317 May cause an allergic skin reaction
H350 May cause cancer
H372 Causes damage to organs through prolonged or repeated exposure

Precautionary Statements: P260 Do not breathe dust/fume/gas/mist/vapours/spray
P280 Wear protective gloves/protective clothing/eye protection/face protection
P363 Wash contaminated clothing before reuse
P405 Store locked up
P501 Dispose of contents/container in accordance with local/regional/national/international regulations

HMIS Health Ratings (0-4):

Health: 1
Flammability: 0
Physical: 0

3. Composition

Chemical Family:	Alloy
Additional Names:	None
Aluminum (Al):	
Percentage:	0-100 wt%
CAS #:	7429-90-5
EC #:	231-072-3
Nickel (Ni):	
Percentage:	0-100 wt%
CAS #:	7440-02-0
EC #:	231-111-4
Boron (B):	
Percentage:	<1 wt%
CAS #:	7440-42-8
EC #:	231-151-2

4. First Aid Procedures

General Treatment:	Seek medical attention if symptoms persist.
Special Treatment:	None
Important Symptoms:	None
Inhalation:	Remove victim to fresh air. Supply oxygen if breathing is difficult.
Ingestion:	Seek medical attention.
Skin:	Wash affected area with mild soap and water. Remove any contaminated clothing.
Eyes:	Flush eyes with water, blinking often for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

5. Firefighting Measures

Flammability:	Non-flammable
Extinguishing Media:	No special restrictions – use suitable extinguishing agent for surrounding material and type of fire.
Spec. Fire Fighting Procedure:	Use full-face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. See section 10 for decomposition products.

6. Accidental Release Measures

If Material Is Released/Spilled:	Wear appropriate respiratory and protective equipment specified in special protection information. Isolate spill area and provide ventilation. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for disposal. Take care not to raise dust.
Environmental Precautions:	Isolate runoff to prevent environmental pollution.

7. Handling and Storage

Handling Conditions:	Wash thoroughly after handling.
Storage Conditions:	Store in a cool dry place in a tightly sealed container. Store apart from materials and conditions listed in section 10.
Work/Hygienic Maintenance:	Do not use tobacco or food in work area. Wash thoroughly before eating and smoking. Do not blow dust off clothing or skin with compressed air.
Ventilation:	Provide sufficient ventilation to maintain concentration at or below threshold limit.

8. Exposure Controls and Personal Protection

Permissible Exposure Limits:	1.00 mg/m ³ as Ni, long-term value
Threshold Limit Value:	0.2 mg/m ³ as Ni long-term value
Special Equipment:	None
Respiratory Protection:	Dust Respirator
Protective Gloves:	Rubber gloves
Eye Protection:	Safety glasses or goggles
Body Protection:	Protective work clothing. Wear close-toed shoes and long sleeves/pants.

9. Physical and Chemical Characteristics

Color	N/A
Form:	Powder, Granules, Pellets, Sputtering target, Custom parts
Odor:	Odorless
Water Solubility:	Insoluble
Boiling Point:	N/A
Melting Point:	639-1638 °C
Flash Point:	N/A
Autoignition Temperature:	N/A
Density:	N/A
Molecular weight:	N/A

10. Reactivity

Stability:	Stable under recommended storage conditions
Reacts With:	Acids
Incompatible Conditions:	None
Hazardous Decomposition Products:	Metal oxide fume, Boron oxide, Aluminum oxide

11. Toxicological Information

Potential Health Effects:

Eyes: May cause irritation
Skin: May cause irritation
Ingestion: May cause irritation
Inhalation: May cause irritation
Chronic: Causes damage to the lung, the kidneys and the the liver through prolonged or repeated exposure. Route of exposure: Oral
Nickel and nickel compounds may cause a form of dermatitis known as nickel itch. They may also cause intestinal disorders, convulsions and asphyxia. Airborne nickel contaminated dusts are regarded as carcinogenic to the respiratory tract
Boron affects the central nervous system. Boron poisoning causes depression of the circulation, persistent vomiting and diarrhea, followed by profound shock and coma. The temperature may become subnormal and a scarletina form rash may cover the entire body.

Signs & Symptoms:

N/A

Aggravated Medical Conditions:

N/A

Median Lethal Dose:

N/A

Carcinogen:

May cause cancer.
IARC-1: Carcinogenic to humans: sufficient evidence of carcinogenicity
ACGIH A1: Confirmed human carcinogen: Agent is carcinogenic to humans based on epidemiologic studies of, or convincing clinical evidence in, exposed humans.
NTP-K: Known to be carcinogenic: sufficient evidence from human studies.

Additional information:

to the best of our knowledge the acute and chronic toxicity of the substance is not fully known.

12. Ecological Information

Aquatic Toxicity:

High

Persistent Bioaccumulation Toxicity:

No

Very Persistent, Very Bioaccumulative:

No

Notes:

Very toxic for aquatic organisms
Avoid transfer into the environment
Keep away from water sources
May cause long lasting harmful effects to aquatic life

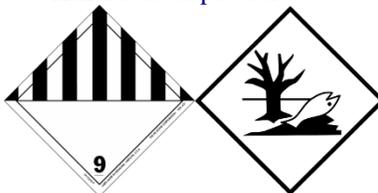
13. Disposal Considerations

Dispose of in accordance with local, state, national, and international regulations.

14. Transportation Data

Hazardous:

Hazardous as powder



Hazard Class:

9 Miscellaneous dangerous substances and articles

Packing Group:

III

UN Number:

UN3077

Proper Shipping Name:

Environmentally hazardous substances, solid, n.o.s. (Aluminum nickel boride)

15. Regulatory Information

Sec 302 Extremely Hazardous:

No

Sec 304 Reportable Quantities:

N/A

Sec 313 Toxic Chemicals:

Yes

16. Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

Document Last Revised:

06/15/2015
